

# Pre-prosthetic surgery technique

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### ABSTRACT

Pre-prosthetic surgery is the process of preparing your mouth for the implantation of a prosthesis. To achieve the highest level of comfort, some patients need minor oral surgical operations prior to receiving a partial or complete denture. It is crucial that the bone is the right size

and shape since a denture rests on the bone ridge. The underlying bone may be pointed and irregular if a tooth needs to be pulled. The bone may need to be smoothed or sculpted for a denture to fit comfortably. Before inserting a denture, extra bone may occasionally need to be removed.

**Key Words:** *Pre-prosthetic surgery; Prosthodontics; General anaesthesia; Guided Bone Regeneration*

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### INTRODUCTION

Using natural teeth and an omnivorous diet, the evolutionary cycle has chosen a masticatory mechanism that is functionally effective [1]. Due to the loss of natural teeth after extraction and bone resorption [2], this system would be created entirely differently. The effects of this resorption appear to be more severe in the mandible than the maxilla and are amplified by wearing dentures [3]. Dentures are formed to fit the soft tissue covering of the jaws and to be compatible with the functional and constantly changing oral environment. They are made of stiff acrylic resin parts. No denture can transcend the constraints of the foundation it is set on, regardless of how beautifully it is made. These techniques make up the surgical pre-prosthetic preparation [4].

Complete denture prosthodontics must include pre-prosthetic surgery. Pre-prosthetic surgery's main objective is to prepare the mouth for a dental prosthesis by reshaping and flattening bony edges that would otherwise make it difficult to restore maximum health and function.

Preprosthetic surgery entails procedures intended to remove certain lesions or abnormalities of the jaw's hard and soft tissues in order to successfully fit the prosthetic appliance later [5]. Therefore, it is crucial for the prosthodontist and oral and maxillofacial surgeon to have a keen understanding of each other's issues and know what can be done to address them cooperatively [3]. This study's objective is to assess the perceptions of a sample of Libyan dentists regarding preprosthetic surgery.

### Pre-prosthetic surgery

Pre-prosthetic surgery is the surgical treatment of the mouth prior to the insertion of a prosthesis or denture. To provide the best level of comfort and fit, some patients need oral surgical procedures prior to receiving a partial or complete denture. A denture rests on the jawbone and gum tissue, so it is crucial that both are healthy. A denture rests on the jawbone and gum tissue. Sometimes the jawbone is crooked, pointed, or has extra bone. The jawbone may need to be reshaped, smoothed, or the extra bone may need to be removed in order for a denture to fit comfortably [6].

In order to give the denture a firm, smooth base that will fit better, move less, and therefore serve the wearer better, pre-prosthetic surgery can remove extra soft tissues and level off uneven bone. On the lower jaw's tongue surface or in the palate, some patients develop bony enlargements. They are known as Tori. Dentures must be removed before being inserted since such bony expansions make it difficult for them to fit comfortably. General anaesthesia is typically used to perform this kind of surgery as a day case. The alveolar ridge's vertical height and horizontal width both noticeably shift as a result of tooth loss. These modifications make it more difficult to restore the edentulous portions with prosthetics in the future. As a result, various approaches for ridge augmentation were suggested. However, no single strategy has been demonstrated to be completely effective [7].

### Guided bone regeneration

The foundation of Guided Bone Regeneration (GBR) is the preservation of room for osteogenic cells to migrate into the wound and the avoidance of unwanted cells ingrowth into the bone defect. In order to facilitate bone repair, membranes are typically used [8]. As a technique of GBR for repair of atrophic alveolar ridges, tenting has been described as expanding the periosteum and soft tissue matrix. The use of personalised ceramic sheets has been suggested as one tenting strategy, and Maelstroms et al, have demonstrated that these sheets are particularly effective in regenerating huge bone volumes in both the horizontal and vertical orientations [9]. For the restoration of mandibular ridge deformities, a different tenting technique using titanium screws and particulate allograft was described.

### REFERENCES

1. Orafi M, Bakoush GM. Awareness and Preference of General Dental Practitioners towards Pre-Prosthetic Surgery as an Adjunctive to Complete Denture Therapy. *Dental.* 2021;3(1):1-9.
  2. Chari H, Shaik KV. Preprosthetic surgery: review of literature. *IJSS Case Rep Rev.* 2016;3(4):10.
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3. Meador LR, Ash D, Laskin DM. Prosthodontists' preferences in preprosthetic surgery. *J Oral Maxillofac Surg.* 1986;44(10):779-80.
4. Choudhari S, Rakshagan V, Jain AR. Evolution in preprosthetic surgery current trends: A review. *Drug Invent Today* 2018;10(10).
5. Bhuskute MV, Shet RG. Preprosthetic surgery: An adjunct to complete denture therapy. *J Int Clin Dent Res Organ.* 2019;11(1):49.
6. Draenert FG, Huetzen D, Neff A, et al. Vertical bone augmentation procedures: basics and techniques in dental implantology. *J Biomed Mater Res.* 2014;102(5):1605-13.
7. Chiapasco M, Zaniboni M, Boisco M. Augmentation procedures for the rehabilitation of deficient edentulous ridges with oral implants. *Clin Oral Implants Res.* 2006;17(S2):136-59.
8. Dahlin C, Gottlow J, Linde A, et al. Healing of maxillary and mandibular bone defects using a membrane technique: an experimental study in monkeys. *Scand J Plast Reconstr Surg Hand Surg.* 1990;24(1):13-9
9. Malmström J, Anderud J, Abrahamsson P, et al. Guided bone regeneration using individualized ceramic sheets. *Int J Oral Maxillofac Surg* 2016;45(10):1246-52.